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10/735,321	12/12/2003	Alain Azagury	IL920030052US1	2268

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IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT.
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EXAMINER

ENGLAND, DAVID E

ART UNIT	PAPER NUMBER
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2443

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05/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,321

Applicant(s)

AZAGURY ET AL.

Examiner

DAVID E. ENGLAND

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claim 38 is presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 38 is provisionally rejected on the ground of nonstatutory double patenting over claims 1 – 7 and 34 – 36 of copending Application No. 12/062211. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

<p>Application 10/735321.</p> <p>38. A computer system, comprising:</p> <p>a local area network (LAN);</p> <p>a plurality of computers without on-board user interface controllers, each of the computers comprising at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN;</p> <p>a console comprising a user input device and a user output device, said console being coupled to communicate over the LAN such that the console conveys an input received via the user input device over the LAN to each of the computers and to receive an output generated by each of the computers over the LAN for display using the user output device; and</p>	<p>Application 12/062211</p> <p>1. A computer system, comprising:</p> <p>a local area network (LAN);</p> <p>a plurality of computers without on-board user interface controllers, each of the computers comprising at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN;</p> <p>and</p> <p>a console comprising a user input device and a user output device, said console being coupled to communicate over the LAN such that the console conveys an input received via the user input device over the LAN to each of the computers and to receive an output generated by each of the computers over the LAN for display using the user output device,</p> <p>Also, Claims 8, 13, 17, 24 and 31.</p>
<p>wherein the plurality of computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames,</p>	<p>2. The system according to claim 1, wherein the computers and the console are arranged to communicate over the LAN by transmitting</p>

	<p>Layer 2 data frames.</p> <p>Also, Claims 18, 25 and 32.</p>
<p>wherein the plurality of computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN,</p>	<p>3. The system according to claim 2, wherein the computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN.</p> <p>Also, Claims 19, 26, 33.</p>
<p>wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol,</p>	<p>4. The system according to claim 2, wherein the computers and the console are arranged to encapsulate the input and output in Internet Protocol (IP) packets for transmission over the LAN.</p> <p>5. The system according to claim 2, wherein the computers and the console are arranged to encapsulate the input and output using an application-layer protocol.</p> <p>Also, Claims 20, 21, 27 and 28.</p>
<p>an input/output (I/O) device, coupled to the LAN,</p> <p>wherein the plurality of computers are arranged to transmit I/O commands over the LAN to the</p>	<p>1. an input/output (I/O) device coupled to the LAN,</p> <p>wherein the plurality of computers are arranged to transmit I/O commands over the LAN to the</p>

I/O device and comprise no on-board I/O device controllers,	I/O device and are without on-board I/O device controllers, and
wherein each of the computers further comprises an emulation processor, said emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device, and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device such that the I/O device is caused to fulfill the commands,	1. wherein each of the computers further comprises an emulation processor, said emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device such that the I/O device is caused to fulfill the I/O commands,
wherein the emulation processor is arranged to encapsulate the I/O commands in any of Ethernet frames, Internet Protocol (IP) packets, and using an application-layer protocol.	34. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises conveying the I/O commands by encapsulating the I/O commands in Internet Protocol (IP) packets for transmission over the LAN. 35. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises conveying the I/O

	<p>commands by encapsulating the I/O commands using an application-layer protocol.</p> <p>36. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises transmitting Ethernet frames.</p> <p>Also, Claims 9 – 11, 14 – 16 and 29.</p>
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Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dai (2005/0049848) in view of Autrey et al. (5774695), hereinafter Autrey.

6. Referencing claim 38, as closely interpreted by the Examiner, Dai teaches a computer system, comprising:

7. a local area network (LAN), (e.g., ¶ 0027);
8. a plurality of computers without on-board user interface controllers, each of the computers comprising at least one central processing unit (CPU) and a LAN interface, the LAN interface being coupled to communicate over the LAN, (e.g., ¶ 0031 & Figures 1 – 3, The server is controlled through the network from another node.);
9. a console comprising a user input device and a user output device, said console being coupled to communicate over the LAN such that the console conveys an input received via the user input device over the LAN to each of the computers and to receive an output generated by each of the computers over the LAN for display using the user output device, (e.g., ¶ 0029 & Figure 2 & ¶ 0041, “API”); and
10. an input/output (I/O) device, coupled to the LAN, (e.g., ¶ 0029 & Figure 2),
11. wherein the plurality of computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames, (e.g., ¶ 0029 VPN),
12. wherein the plurality of computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN, (e.g., ¶ 0029 VPN),
13. wherein the plurality of computers are arranged to transmit I/O commands over the LAN to the I/O device and comprise no on-board I/O device controllers, (e.g., ¶ 0031 & Figures 1 – 3, The server is controlled through the network from another node.),
14. wherein each of the computers further comprises an emulation processor, said emulation processor coupled to trap the I/O commands from the at least one CPU while emulating the I/O device, and to encapsulate the I/O commands in data frames for transmission over the LAN to

the I/O device such that the I/O device is caused to fulfill the commands, (e.g., ¶ 0033 – 0035, 0054),

15. wherein the emulation processor is arranged to encapsulate the I/O commands in any of Ethernet frames, Internet Protocol (IP) packets, (e.g., ¶ 0007), but does not specifically teach wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol,

16. wherein the emulation processor is arranged to encapsulate the I/O commands using an application-layer protocol.

17. Autrey teaches wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol, (e.g., col. 2, lines 13 – 25 & col. 8, lines 3 – 24s);

18. wherein the emulation processor is arranged to encapsulate the I/O commands using an application-layer protocol, (e.g., col. 2, lines 13 – 25 & col. 8, lines 3 – 24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Autrey with Dai because if one is to test and run a network using an emulation, then one would need to test all layers of the OSI model so a user know that the complete network topology is working correctly and not just one or two layers.

Response to Arguments

19. Applicant's arguments filed 02/03/2009 have been fully considered but they are not persuasive.
20. **In the Remarks**, Applicant argues in substance that the copending Application No. 12/062211 claims 1 – 37 have different scope than this application.
21. As to this Remark, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.
22. **In the Remarks**, Applicant argues in substance that Dai does not teach the limitation of “wherein each of the computers comprises an emulation processor, which is coupled to trap the I/O commands from the at least one CPU while emulating the I/O device, and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device, so as to cause the I/O device to fulfill the commands” because Dai teaches a logical over physical storage that is located at the “slave-end” of the master-slave relationship and using a device to emulate another device in a similar class is not related and is clearly differentiated from the claimed invention.
23. As to this remark, Dai being at the “slave –end” of the master-slave relationship has nothing to do with what is claimed or areas that have been cited by Dai. As for the “computers without on-board user interface controllers, this is nothing more than a type of server. What Applicant claims is an emulation processor that traps commands from a CPU while emulating a device and then encapsulating the command and transmitting it. Applicant's argument that using

a device to emulate another is not related contradicts their invention since an emulator is a program on a device, which can be utilized for other task, which emulates another device. That is what the claimed invention is also performing, “the emulation processor coupled to trap the I/O commands from the at least one CPU **while emulating the I/O device**”. Using the Applicant’s claim language, it is clear that the prior art performs the same functions as the claimed invention.

24. Applicant’s other argument is addressed above.

Conclusion

25. **Applicant is invited to contact the Examiner for an interview to further prosecution if they deem necessary.**

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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